

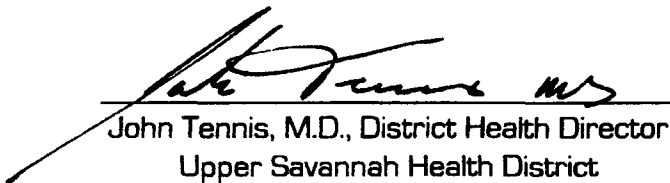
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**Certified Public Manager Program  
Management Project**

**Rabies Reporting  
in the  
Upper Savannah Health District**

By Al Lyerly, REHS/RS, Director  
Environmental Health Services  
DHEC-Upper Savannah Health District  
P.O. Box 3227  
Greenwood, SC 29646  
(864)942-3616  
SS# 250-96-5391

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John Tennis, M.D., District Health Director  
Upper Savannah Health District

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# **RABIES REPORTING IN THE UPPER SAVANNAH HEALTH DISTRICT**

## **Introduction:**

Human rabies is the one of the deadliest viruses known to man. For all practical purposes it is 100% fatal. Prevention of the transmission of rabies from animals to humans has been a historical function of the Department of Health and Environmental Control's Bureau of Environmental Health Services. Department environmentalists, as a part of their regular duties, routinely perform exposure investigations, consult with animal control officials, quarantine animals, oversee the submission of samples to the Department's laboratory, and advise the public regarding the danger of potential exposure. Because of the potentially lethal nature of rabies and its presence in every area of South Carolina the Environmental Health Section places its highest priority on this program.

## **Problem Description:**

Potential rabies exposures are not being reported by area Hospitals adequately in the Upper Savannah Health District. Generally the reporting process is bulky and cumbersome and reporting requirements are unfamiliar to emergency room staffs. In addition, only one or two Environmental Health personnel are carrying the burden of report monitoring and follow-up for the district's rabies program. Area hospitals are not reporting or have bought into a ineffective reporting process. DHEC's medical consultation resources are often not called upon while the patient is at the hospital resulting in delays of needed treatments, improper treatment, or treatment that may not be needed. Consequently, customers may be incurring a preventable risk or are being inconvenienced because of an inadequate reporting system.

**Project Goals:**

1. Reduce reporting time to within 12 hours at least 85% of the time.
2. Provide emergency room consultation while patient waits.
3. Obtain buy-in by staff and area hospitals to an improved process.
4. Fairly distribute work load among Environmental Health Staff.
5. Implementation of a comprehensive communication procedure.
6. Streamline reporting by refining the process.

**Definitions:**

Emergency rabies exposures - animal bite on the face, neck, or head

Routine rabies exposures - animal bite other than on the face, neck, or head.

**Management - Actions and Principles:**

1. Development of participative management (1)(2) and openness in Environmental Health Team (10)(11)(12).
2. Project Team to evaluate and propose process improvements (6)(17).
3. Quality Management principles and implementing CQI measurement tools (13)(15)(16)(21).

**Resources:**

1. The Environmental Health team is composed of committed professionals with a deep belief in the importance of their work in this high priority program.
2. The supervisory staff has the support and respect of their subordinates.
3. Support for improving the process by the District Health Director (superior).
4. Monetary resources for equipment.
5. Rabies Control Act (Law).

**Measurement Criteria:**

Two measurements will be evaluated.

1. Animal Incident/Rabies Investigation Report (page 11) filed by hospital emergency rooms within 12 hours of receiving patient.
2. When needed, consultations with doctors will take place within 30 minutes of a request by a physician or before the patient is released from the hospital.

Baseline: At present an estimated 95% of all reports are received after the 12 hour mandated reporting period.

At present no formal process is in place for returning calls to hospital emergency rooms.

Information from the Animal Incident/Rabies Investigation Report (page 10) will be used to gather data on reporting times. Date and time of call will be compared to date and time of bite to determine reporting period. This information will be reported on an frequency diagram in addition percentages will be recorded (21).

When emergency consultations are required. Environmentalists will record times when calls are received from the District Management Team member manning the Emergency Reporting Beeper. The environmentalist will return the call immediately or as soon as possible. These times will be used to evaluate the 30 minute objective.

Review of these objectives will be made at the end of the 120 day period (page 6) to determine their feasibility. The environmental health project team will consult with hospital emergency room staff to consider significant positive and negative variations in the process resulting from changes in common cause and special cause variables acting on the process (8). Limited testing of potential improvements (trials) will be implemented and evaluated. If successful, the tested improvements will be standardized and incorporated into the process (8).

**Potential Obstacles:**

Potential obstacles to success are the need to recognize the importance of participation, resistance to change (5), commitment from key partners (4), and past ineffective processes (14).

It is obvious why it is important to improve an ineffective system and participate in a more efficient rabies reporting system. The potentially lethal risk of human rabies in the community is much reduced.

But why would there be resistance to change and what can be done to win over key partners. The organizational structure of a large hospital is composed of highly intelligent staff working with extremely complex processes establishing a formal hierarchy. Therefore, change is not easily incorporated. A strong need for change in the process must be established and appropriately presented at the correct junction in the hierarchy. Because this highly structured environment is not easily influenced by outside forces, it is important to identify the appropriate key partners in the process. Then present the justifications for change in the process, why the existing process has failed, where the failures were, and suggestions for improvement.

Anticipated key players are hospital management, medical authority, nursing, and administrative support. An objective of the project is to identify the members of these disciplines, then in an appropriate forum present the objectives of the health department, problems with the existing process and justifications for implementing an improved process.

I anticipate that an incorrect understanding of the responsibilities of the hospital is the primary reason that change in the process has been resisted. There is good public health logic for this needed change. Rabies is lethal and is endemic in the wild animal population in South Carolina. It migrates into our domestic animal population everyday and there puts humans at risk of exposure. Once infected, medical treatment is the only hope of preventing death from human rabies. For these reasons the Rabies Control Act was passed by the South Carolina Legislature. This law requires compliance. Therefore, correcting a faulty understanding of the hospital's responsibilities should be a strong influence for change in the process. In addition, making the hospital aware of their liabilities and the potential consequences resulting from noncompliance with the Rabies Control Act should certainly add to their recognizing the need for change.

Finally, it will be our responsibility to accommodate their needs and allow variations in the process to achieve a win-win outcome. Then follow through with feedback on the status of the changes and help identify common and special causes of variations which may cause concerns.

## **Implementation Strategy:**

### Establish Processes

Environmental Health Project Team: Team should be composed of district rabies coordinator, a county environmentalist from each county with a hospital, and an environmental health supervisor liaison.

Team tasks:

1. Determine mandatory reporting requirements
2. Review administrative and technical needs
3. Develop draft reporting details

Hospital Support Team: Team composition should include key staff determined by the hospital, a county environmentalist, and an environmental health supervisor liaison.

Team tasks:

1. Determine internal process controls
2. Identify key hospital personnel
3. Select hospital liaison for environmental health team
4. Establish joint communication strategy

### Emergency call from Hospital Emergency Room - See Process Flow Chart (page 7):

An emergency rabies exposure will be reported to the local health department during normal office hours and to the Upper Savannah Health District's emergency 800 beeper after hours or on weekends. After hours calls will be forwarded to the environmentalist in the county where the exposure/bite occurred (page 9). The environmentalist will begin an exposure investigation by calling the hospital emergency room or doctor's office and collecting information on the victim and the animal. In addition, the environmentalist will consult with the physician to determine the seriousness of the exposure and whether it qualifies as an emergency requiring immediate treatment. The environmentalist may draw from any resource needed to make decisions related to treatment and refer medical questions to the appropriate medical personnel. If it is determined to be an exposure requiring immediate treatment, then the sanitarian will secure the

appropriate vaccines and arrange delivery to the hospitals. If the exposure is determined "not" to be an emergency requiring antirabies vaccine treatments, then the environmentalist will arrange for the quarantine or sample submission. If needed a quarantine inspection will be scheduled.

**Non-Emergency Potential Rabies Exposure Report** - See Process Flow Chart (page 8):

Non-emergency rabies exposures should be reported to the environmentalist in the county where the exposure occurred. After hours reporting can be telephoned to the Upper Savannah Health District's rabies 800 reporting number or FAXed to Environmental Health's FAX number 864/942-3619. The rabies investigation will be implemented the next business day.

Team members should evaluate strategies for involving environmental health staff (7), equitable distribution of work load, most effective methods of communication, needed equipment (beepers, answering machines, call forwarding, etc.), and perform detailed process analysis with recommendations. Methods of presenting the problem to hospital personnel should be evaluated and selected (3) emphasizing their role and their reporting requirements (18). Environmental health staffing considerations should take into account the perceptions that this is extra work for some but fairly distributes the work load (20). Concerns of environmental health team members should be carefully evaluated and discussed (5). All questions should be treated with genuine concern for the feelings of the individual and their value to the process expressed (9)(10)(19).

**Project Benefits Summary:** See Timeline (page 6)

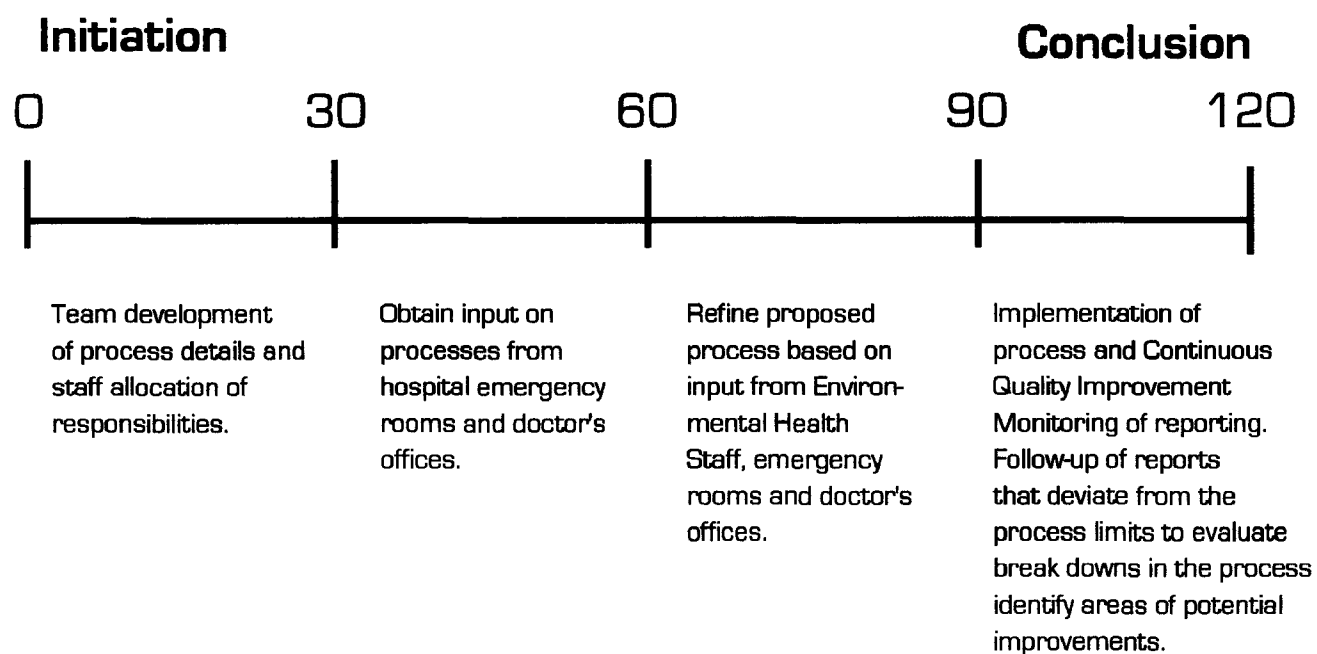
It is imperative that accurate and timely reporting of potential exposure to rabies is accomplished. Therefore, an effective reporting process must be developed. Because interaction with several hospitals and doctor's offices is needed, this process will require constant monitoring and evaluation of the common and special cause variations that influence the process (8)(21). Diplomacy is essential to success. Win-win solutions must be incorporated and barriers to successful reporting must be identified through the team approach and open participation (14)(20).

But when successful, our customers, the public in the Upper Savannah Health District, will have a significantly reduced potential risk of exposure to rabies and its deadly consequences.

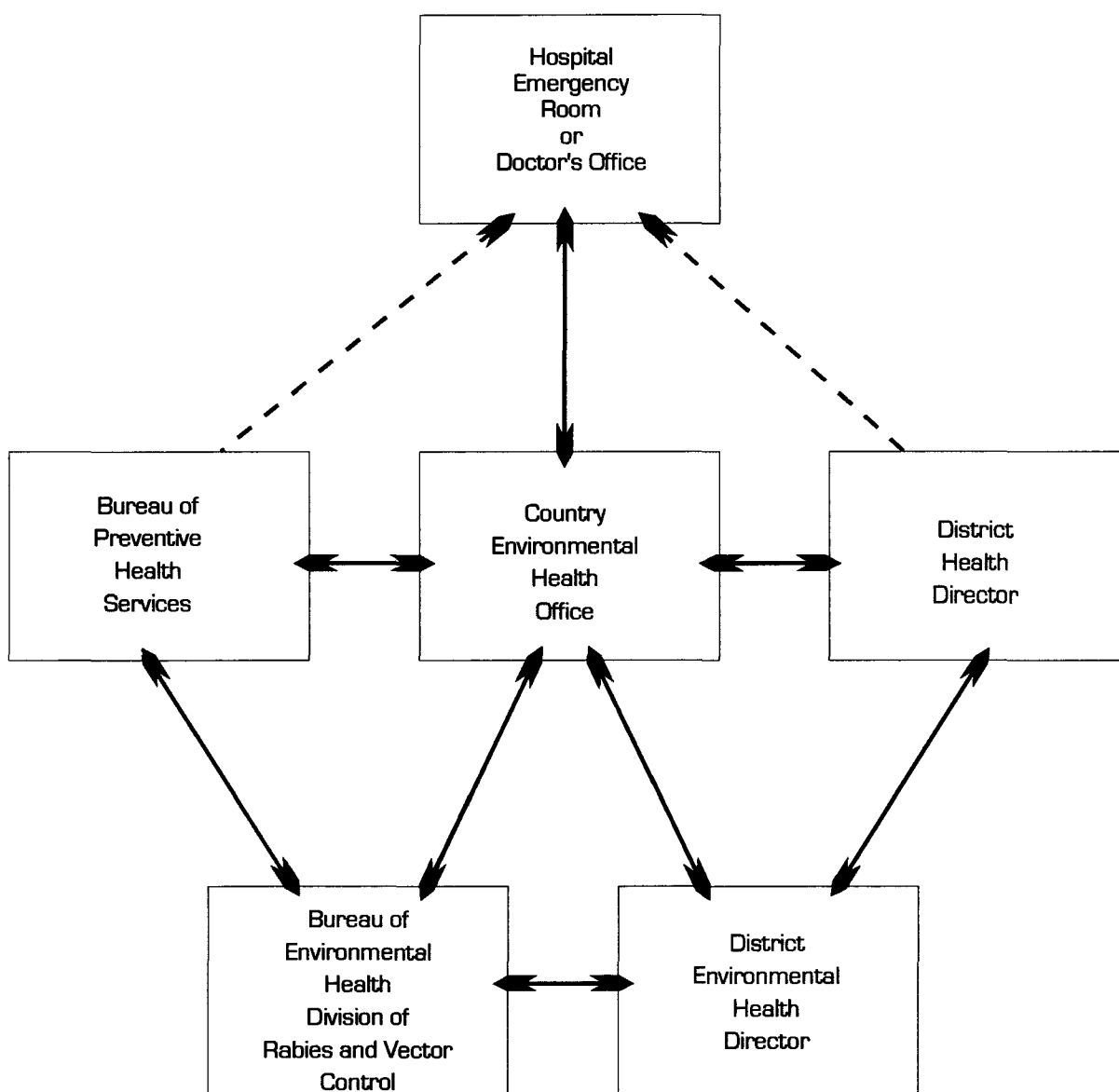


# Implementation Timeline

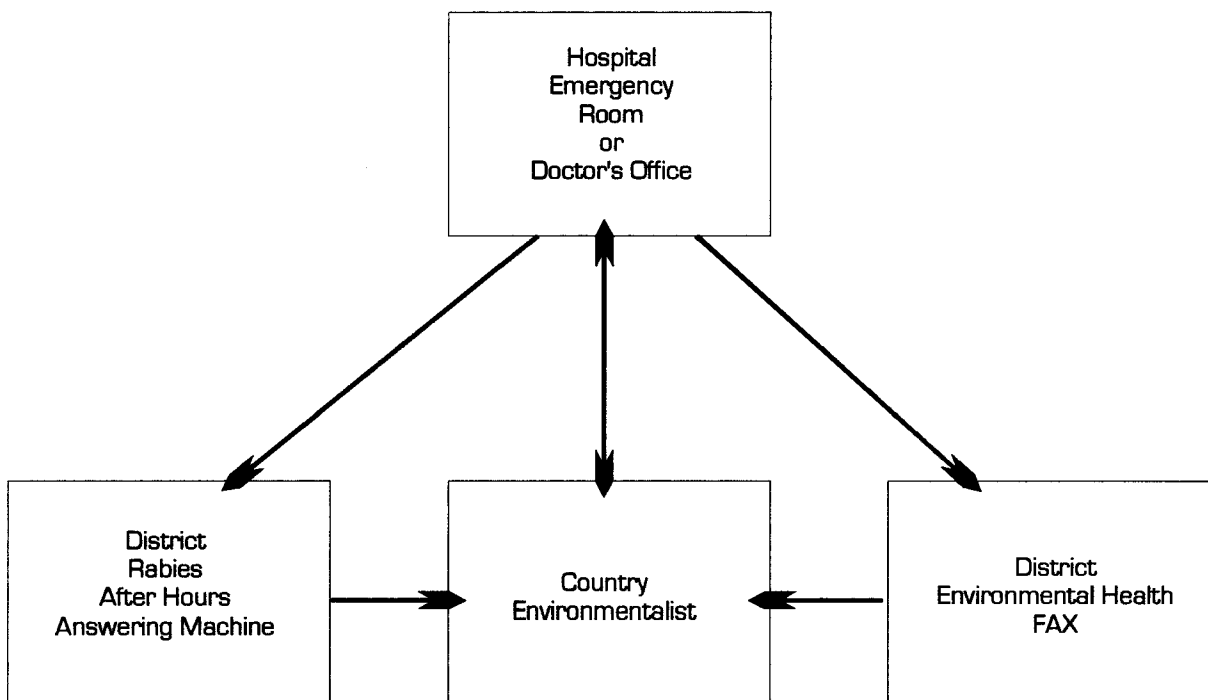
**DAYS**



# Emergency Rabies Exposure Medical Reporting and Consulting Process Flow Chart



# **Routine Non-Emergency Rabies Exposure After Hours Medical Reporting Process Flow Chart**



## UPPER SAVANNAH ENVIRONMENTALISTS

### ABBEVILLE COUNTY

Rod Stroud	(864) 227-9673
Cindy Weeks	(864) 223-4214
Von Long	(803) 364-2916

### EDGEFIELD COUNTY

Milton Crouch	(803) 685-7254
Todd Self	(864) 333-2768
Ron Koeppen	(864) 223-3237

### GREENWOOD COUNTY

Freddie Payne	(864) 223-2292
Cindy Weeks	(864) 223-4214
Ron Koeppen	(864) 223-3237

### LAURENS COUNTY

Charles Cogsdill	(864) 984-0174
Thomas Robertson	(864) 876-3049
Von Long, Jr.	(803) 364-2916

### MCCORMICK COUNTY

Todd Self	(864) 333-2368
Rod Stroud	(864) 227-9673
Ron Koeppen	(864) 223-3237

### SALUDA COUNTY

Allen Williams	(803) 945-9866
Milton Crouch	(803) 685-7254
Von Long	(803) 364-2916

**Note:** The first environmentalist listed under the county is the primary contact with each subsequent name being the backup contact.

The above list is for emergency potential rabies exposure contacts. Routine complaints or animal bites should be recorded on the attached form and FAXed to the appropriate county health department the next working day.



**Animal Incident/Rabies Investigation Report**  
**Division of Vector Control**

County: \_\_\_\_\_ District: \_\_\_\_\_ Request/File No.: \_\_\_\_\_  
Call Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time of Call: \_\_\_\_\_  
Person Reporting Incident: \_\_\_\_\_ Phone No.: \_\_\_\_\_  
Investigating Sanitarian(s): \_\_\_\_\_

**Victim Information**

Victim: \_\_\_\_\_ Date of Bite: \_\_\_\_\_  
Age: \_\_\_\_\_ Weight: \_\_\_\_\_ Phone No. (home): \_\_\_\_\_ (work): \_\_\_\_\_  
Parent/Guardian (if minor): \_\_\_\_\_  
Address (if not a street address, give directions): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Attending/Family Physician: \_\_\_\_\_  
Describe circumstances of bite: severity and location of wound: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Was bite provoked or unprovoked? \_\_\_\_\_

**Animal Information**

Type: \_\_\_\_\_ Pet ☐ Stray ☐ Breed: \_\_\_\_\_ Color: \_\_\_\_\_ Sex: \_\_\_\_\_ Size: \_\_\_\_\_  
Owner: \_\_\_\_\_ Phone (home): \_\_\_\_\_ (work): \_\_\_\_\_  
Address (if not a street address, give directions): \_\_\_\_\_  
\_\_\_\_\_  
Vaccinated against rabies? ☐ Yes ☐ No Date: \_\_\_\_\_ Tag No.: \_\_\_\_\_ Vet.: \_\_\_\_\_  
Location of animal at time of bite: \_\_\_\_\_  
\_\_\_\_\_  
Condition of animal at time of bite: \_\_\_\_\_  
\_\_\_\_\_

**Action Taken**

Animal Quarantined: \_\_\_\_\_ Date: \_\_\_\_\_  
Location & Conditions of Quarantine: \_\_\_\_\_  
Dates Visited: \_\_\_\_\_ Date Released: \_\_\_\_\_  
Head Sent to Lab? ☐ Yes ☐ No Date: \_\_\_\_\_ Sender: \_\_\_\_\_  
Results: \_\_\_\_\_  
Other Comments: \_\_\_\_\_  
\_\_\_\_\_

## REFERENCES

1. *Introduction to TQM*, DHEC Office of Quality Assurance
2. *Quality Management Skills*, Organizational Dynamics, Inc.
3. *The Voice of the Customer*, Organizational Dynamics, Inc.
4. *The Manager's Role in Planning*, Center for Education, Quality and Assessment
5. *Managing Change*, Center for Education Quality and Assessment
6. *Team Management Skills*, Center for Education, Quality and Assessment
7. *Shared Leadership*, Developing a Strategy for Success, American Mgt. Assoc.
8. *Fourth Generation Management*, Joyner and Associates
9. *Heroz*, Byham and Cox
10. *Leadership is an Art*, Max DePree
11. *Driving Fear out of the Work Place*, Ryan Oestreich
12. *Transforming The Way We Work*, Edward M. Marshall
13. *Putting Quality Management to Work*, Marshall Sashkin and Kenneth J. Kiser
14. *Reinventing Government*, David Osborne and Ted Gaebler
15. *Zapp!, The Lightning of Empowerment*, William C. Byham, Ph.D. with Jeff Cox
16. *The One Minute Manager*, Kenneth Blanchard, Ph.D., Spencer Johnson, M.D.
17. *The One Minute Manager Builds High Performing Teams*, Blanchard, Carew
18. *The One Minute Manager Meets the Monkey*, Blanchard, Oncken, Burrows
19. *Leadership and The One Minute Manager*, Blanchard, Zigarmi, Zigarmi
20. *Why Employees Don't Do What They're Supposed to Do*, Gournies
21. *Statistical Methods for Quality Improvement*, Hitoshi Kume